

## AMENDMENT TO THE CLAIMS

This Listing of Claims will replace all prior versions and listings of claims in the Application.

### Listing of Claims:

Claim 1 (Currently amended): A testing method of array configuration for a multiple disk-array system ~~containing at least one disk array, each array having at least one disk drive with an array configuration, said array configuration comprising array quantity of disk drives, a disk sequence/function and serial check sum of every disk drive in one disk array,~~ said testing method comprising steps of:

providing an interface operable to access a plurality of disk-arrays coupled thereto, where data is distributed across each disk-array of said plurality of disk-arrays independently of said distribution across other disk-arrays of said plurality of disk-arrays;

providing each disk drive of a corresponding disk-array of said plurality of disk-arrays with an array configuration structure, said array configuration structure including an indication of a number of disk drives in said corresponding disk-array and a serial check sum of each disk drive in said corresponding disk-array, said serial check sum of each said disk drive being arranged in said array configuration structure in accordance with a position and function of said disk drive in said corresponding disk-array;

reading said array configuration structure;

acquiring a ~~quantity~~ said indication of said number of disk drives from said array configuration structure and computing therefrom a corresponding number of disk drives;

reading every said serial check sum in said array configuration structure of ~~all disk drives from one array~~; and

comparing said ~~quantity~~ number of disk drives computed in said indication acquiring step with ~~another quantity~~ a number of disk drives ~~deduced~~ determined from said serial check sum reading step of ~~each disk drive in one array~~.

Claim 2 (Cancelled).

Claim 3 (Currently amended): The testing method as in claim 1 2, further comprising steps of:

providing said array configuration structure with a disk sequence/function record for a corresponding disk drive;

acquiring a said disk sequence/function record ~~in~~ from said array configuration structure; and

comparing said disk sequence/function record with ~~another~~ a disk sequence/function ~~deduced~~ determined from said serial check sum reading step ~~sums of said disk drives in one disk array~~.

Claim 4 (Currently amended): The testing method as in claim 1, wherein said serial check sum of each said disk drive is obtained according to a numeration on a model number, a serial number, and a firmware revision number of said disk drive.

Claim 5 (Currently amended): The testing method as in claim 1, wherein said array configuration structure further comprises an array type, ~~which is relevant to~~ indicative of a recording method of ~~said quantity~~ a corresponding number of disk drives, said array configuration structure further including a quantity field corresponding to said recording method and indicative of said corresponding number of disk drives.

Claim 6 (Currently amended): The testing method as in claim 5, wherein said ~~quantity~~ a number of disk drives ~~in a specific array~~ is determined by:

reading ~~an~~ said array type;  
reading ~~said an array type-related quantity field of disk drives record;~~ and  
computing numerating a quantity said number of disk drives ~~in~~ from said quantity field associated with said array type.

Claim 7 (Currently amended): The testing method as in claim 3, wherein said array configuration structure further comprises an array type, ~~which is relevant to~~ indicative of a recording method of said disk sequence/function.

Claim 8 (Currently amended): The testing method as in claim 7, wherein said disk sequence/function ~~in a specific array~~ is determined by:

reading ~~an~~ said array type;  
reading ~~an array type related by~~ said disk sequence/function record; and  
calculating a disk sequence/function for each disk drive in accordance with  
said array type.

Claim 9 (Currently amended): A testing method of array configuration for a  
multiple disk-array system ~~containing at least one disk array, each array having at~~  
~~least one disk drive with an array configuration, said array configuration~~  
~~comprising array quantity of disk drives, a disk sequence/function and serial check~~  
~~sum of every disk drive in one disk array, said serial check sums of said disk~~  
~~drives in one disk array being arranged in an order according to a sequence and a~~  
~~function of said disk drives,~~ said testing method comprising steps of:

providing an interface operable to access a plurality of disk-arrays coupled  
thereto, where data is distributed across each disk-array of said plurality of disk-  
arrays independently of said distribution across other disk-arrays of said plurality  
of disk-arrays;

providing each disk drive of a corresponding disk-array of said plurality of  
disk-arrays with an array configuration structure, said array configuration structure

including an indication of a number of disk drives in said corresponding disk-array, a disk sequence/function record, and a serial check sum of each disk drive in said corresponding disk-array, said serial check sum of each said disk drive being arranged in said array configuration structure in accordance with a position and function of said disk drive in said corresponding disk-array;

reading said array configuration structure;

acquiring said disk sequence/function record ~~of said array~~ from said array configuration structure;

reading every said serial check sum ~~of all disk drives from in~~ said array configuration structure; and

comparing said disk sequence/function record with ~~another~~ a disk sequence/function ~~deduced~~ determined from said serial check sum reading step ~~of each disk drive in one array~~.

Claim 10 (Currently amended): The testing method as in claim 9, further comprising steps of:

acquiring ~~a quantity~~ said indication of said number of disk drives from said array configuration structure and computing therefrom a corresponding number of disk drives; and

comparing said ~~quantity~~ number of disk drives with ~~another quantity a~~  
number of disk drives ~~deduced~~ determined from said serial check sum reading step  
~~of each disk drive in said array.~~

Claim 11 (Currently amended): The testing method as in claim 9, wherein said  
serial check sum of each said disk drive is obtained according to a numeration on a  
model number, a serial number, and a firmware revision number of said disk drive.

Claim 12 (Currently amended): The testing method as in claim 9, wherein said  
array configuration structure further comprises an array type, ~~which is relevant to~~  
indicative of a recording method of said disk sequence/function.

Claim 13 (Currently amended): The testing method as in claim 12, wherein said  
disk sequence/function in a specific array is determined by:

reading ~~an~~ said array type;

reading ~~an array type related by~~ said disk sequence/function record; and

calculating a disk sequence/function ~~for each disk drive in~~ accordance with  
said array type.

Claim 14 (Currently amended): The testing method as in claim 9, wherein said array configuration structure further comprises an array type, ~~which is relevant to~~ indicative of a recording method of said quantity a corresponding number of disk drives, said array configuration structure further including a quantity field indicative of said corresponding number of disk drives.

Claim 15 (Currently amended): The testing method as in claim 14, wherein said recording method of said quantity of disk drives comprises steps of:

reading ~~an~~ said array type;

reading ~~an array type related by~~ said quantity field ~~of disk drives record;~~

and

~~computing numerating a quantity~~ said number of disk drives in from said quantity field associated with said array type.